

DECISION RECORD

Modification to Keystone Mine Plan of Operations CACA-33965

Environmental Assessment DOI-BLM-CA-D050-2018-0007-EA

Bureau of Land Management, Ridgecrest Field Office

INTRODUCTION AND BACKGROUND

Bush Management Company (BMC) requests Bureau of Land Management (BLM) authorization for a modification to the Keystone Mine Plan of Operations, the Keystone Mine (CACA-033965) Plan of Operations Amendment (Project) (SRK, 2016). The approved Plan of Operations consists of approval of an existing underground mine in 1981, approval of an amendment in 1983, and a further amendment in 1988.

BUREAU OF LAND MANAGEMENT NEED FOR THE PROPOSED ACTION

The Federal Land Policy and Management Act of 1976 provides BLM with a variety of policy declarations, administration and management requirements for the California Desert Conservation Area. The portion of the Federal Land Policy and Management Act of 1976 (FLPMA) entitled "Management of use, occupancy and development of public lands" (43 USC 1732(b)) states that "Except as provided in section 1744, section 1782, and subsection (f) of section 1781 of this title and in the last sentence of this paragraph, no provision of this section or any other section of this Act shall in any way amend the Mining Law of 1872 or impair the rights of any locators or claims under that Act, including, but not limited to, rights of ingress and egress. In managing the public lands the Secretary shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of the lands."

That section of FLPMA creates a need for BLM to provide legal ingress and egress, separate from the right-of-way requirements of 43 USC 1761 and other sections of FLPMA, for claimants and their operators to enter the public lands for purposes authorized by the Mining Law of 1872, while at the same time creating a need for BLM to prevent unnecessary or undue degradation of public lands and resources. The BLM satisfies both these needs through Surface Management regulations 43 CFR 3809, together with BLM manuals and guidance (to the extent consistent with the mining laws) of pertinent land use management plans.

PROJECT AND ALTERNATIVES DESCRIPTION

BMC has submitted a modification plan to drill and sample for locatable minerals. BMC's plan is to transport a drill rig to the Keystone lode claims and drill up to 45 holes on seven drill pads, drill to between 600 and 1,020 feet deep at each location, take samples, plug the hole(s) and reclaim the sites. All alternatives are described fully in the Project's Environmental Assessment (EA) DOI-BLM-CA-D050-2018-0007-EA.

BMC proposes to amend the existing plan of operations to include the following changes:

- Inclusion of up to 45 additional drill holes located on seven existing drill pads. The drill pads are located on existing disturbance. More than one hole would be located on each pad; and
- Conveyance of water via a pipeline from the BLM boundary to the 5,000 gallon water tank at the intersection of Goler Wash Road (officially called Coyote Canyon Road) and the Keystone Mine Maintenance Road. Any additional water needed would be hauled via truck from Trona, California.
- Proposed operations would occur on existing disturbance. No additional disturbance acres are proposed.

DECISION

I have reviewed EA DOI-BLM-CA-D050-2018-0007-EA, and have issued a Finding of No Significant Impact (FONSI) for the Keystone Exploration Drilling Project, plan of operation CACA-033965. The BLM has determined that the operations under the selected alternative will not cause unnecessary or undue degradation, as defined in the BLM's surface management regulations at 43 CFR Part 3809. It is my decision to approve the Proposed Action Alternative as described in Chapter Two of the EA to the extent this alternative applies to BLM-managed public lands, subject to the mitigation and conservation measures described in that EA and outlined below. The BLM has determined that the operations under the selected alternative will not cause unnecessary or undue degradation, as defined in the BLM's surface management regulations at 43 CFR Part 3809.

In accordance with 43 CFR 3809.803 and 3809.808, this Decision is in full force and effective immediately. The conditions of approval include:

ENVIRONMENTAL PROTECTION MEASURES

Performance Standards

The performance standards of 43 CFR 3809.420 apply to this operation. Failure to comply with any of these performance standards is a prohibited act under 43 CFR 3809.605.

Best Management Practices, Applicant Committed Measures, and Conservation Management Actions (CMAs)

A complete listing of measures is found in Chapter 2 of the EA.

Wildlife and Vegetation

1. In accordance with CMAs LUPA-BIO-2, LUPA-BIO-13, and LUPA-BIO-16, a contracted biologist would be on-site during excavations and equipment movement as needed to ensure avoidance of sensitive biological resources and to ensure that minimization measures are appropriately implemented. In accordance with CMAs LUPA-BIO-3 and LUPA-BIO-4, resource setbacks would be identified, and/or seasonal restrictions or visual barriers installed

to avoid or minimize adverse effects to specific biological resources such as riparian vegetation or Focus or BLM special status species habitat areas.

2. In accordance with CMAs LUPA-BIO-4 and LUPA-BIO-RIPWET-3, BMC would attempt to perform drilling outside of the avian breeding season (February 1st through August 1st). If work must be conducted during nesting season, a pre-drilling survey would be conducted by a contracted biologist approved by the BLM. If active nests are located during pre-drilling surveys, drilling activities within a species-specific buffer of the nest would be postponed or halted until the nest is vacated and juveniles have fledged, as determined by the designated biologist. The appropriate buffer area would be decided in consultation with the BLM. Drilling would be postponed if the biologist notes evidence of a second nesting attempt. The project biologist should serve as a monitor during those periods when drilling activities would occur near active nest areas to ensure that no inadvertent impacts would occur.
3. Weeds would be controlled as described in CMA LUPA-BIO-11. Weed management would include, but not be limited to, the washing of vehicles that have previously worked in areas of noxious weeds, use of weed-free materials, and monitoring as described in CMA LUPA-BIO-10.
4. In accordance with CMA LUPA-14, wildlife would not be harassed or fed, trash would be kept contained, and the area would be checked for wildlife prior to the movement of equipment and drilling activity. Domestic pets would be prohibited in the area. Drilling is expected to occur 24 hours per day, so artificial light would be necessary to maintain safe work practices. This lighting would be kept to a minimum and directed toward the ground.
5. One end of each sump would be sloped to provide an escape route in the event an animal enters the sump. Temporary fencing would be constructed around the sumps to limit access. Sumps would be back-filled after completion of drilling.
6. The BLM would be immediately notified in the event that any indication of any special status species is found or noticed in the vicinity of the project.
7. All employees of the project proponent who work on-site shall participate in a tortoise education program prior to initiation of field activities. The project proponent is responsible for ensuring that the education program is developed and presented prior to conducting activities. New employees shall receive formal, approved training prior to working on-site. The employee education program must be received, reviewed, and approved by the BLM Resource Area Office at least 15 days prior to the presentation of the program. The program may consist of a class presented by a qualified biologist (BLM or contracted) or a video.
8. The project proponent shall designate an on-site biologist who will be responsible for overseeing compliance with protective stipulations for the desert tortoise and for coordination with the BLM. The biologist must be on-site with a copy of the stipulations during all project activities and they shall have the authority to halt all project activities that are in violation of the stipulations. If a tortoise is sighted in or near project work areas, the biologist will stop work until the tortoise leaves of its own accord. Handling of tortoises is prohibited.
9. A speed limit of 15 miles per hour would be adhered to in accordance with CMA LUPA-

BIO-IFS-9.

10. In accordance with CMA LUPA-BIO-9, water and wetland-dependent resource protection measures would be implemented to avoid or minimize adverse impacts to these areas. Pre-construction/activity surveys would be carried out for BLM special status riparian and wetland
11. The Operator will reduce predator subsidies, such as perching sites and water sources, in accordance with CMA LUPA-BIO-6. Compensatory mitigation contributions for ravens are not applicable for this short-term project.
12. Non-native and invasive weeds will be controlled through pre-disturbance weed removal by hand, the cleaning of vehicles, use of weed-free materials, revegetation during reclamation, and post reclamation weed monitoring and retreatment in accordance with LUPA-BIO-10.
13. Standard noise controls will be used on the exploration equipment in accordance with LUPA-BIO-12. The area will be surveyed for sensitive resources, especially for nesting birds, by a biological monitor in accordance with LUPA-BIO-2.
14. Other wildlife and vegetation protection measures will include, minimization of disturbance areas to only what is necessary and permitted for the Project in accordance with CMA LUPA-BIO-15. Unless otherwise approved, access to the area is via county roads and designated routes and cross country travel is prohibited.
15. No holes will be left open and unattended for prolonged periods of time.

Worker Education

Operator employees and contractors will be educated about the topics stipulated in CMA LUP-BIO-5 which include, but are not limited to, biological resource identification, protections, avoidance, reporting, and protection measures.

Erosion and Sediment Control

1. Roadwork would not occur during rain or snowstorm events and for a period of time following when the Project Area is covered with snow or the soil is in a saturated, muddy, or in unstable condition.
2. Sumps for drill water, fluids, and cuttings would be excavated within the limit of the drill site. Anticipated sump dimensions would be about eight feet by four feet by five feet deep or smaller depending on the hole depth and volume needed. Final sump dimensions would be designed to meet the estimated required capacity of drill fluids and cuttings with one foot of freeboard. It is anticipated that one sump would be sufficient for multiple holes on the same pad but for bonding purposes, one sump was added to the cost estimate for each drill hole. This would provide sufficient capacity to fully contain all drilling fluids.
3. Stormwater management structures would be installed, as required, to ensure the existing drill pad sites would not channel stormwater that could either result in excessive sediment

loss or make the road impassable. The proposed reclamation would be conducted at the earliest practical time.

Cultural Resources

A Class III baseline cultural survey was completed for the Project in accordance with CMA LUPA-CUL-4. If, by chance, heritage resources are discovered that were not found in the cultural surveys, BMC will abide by 43 CFR § 3809.420(b) (8), which states:

- (i) Operators shall not knowingly disturb, alter, injure, or destroy any scientifically important paleontological remains or any historical or archaeological site, structure, building or object on Federal lands.
- (ii) Operators shall immediately bring to the attention of the authorized officer any cultural and/or paleontological resources that might be altered or destroyed on Federal lands by his/her operations, and shall leave such discovery intact until told to proceed by the authorized officer. The authorized officer shall evaluate the discoveries brought to his/her attention, take action to protect or remove the resource, and allow operations to proceed within 10 working days after notification to the authorized officer of such discovery.
- (iii) The Federal Government shall have the responsibility and bear the cost of investigations and salvage of cultural and paleontology values discovered after a plan of operations has been approved, or where a plan is not involved.

AUTHORITIES

This decision is in conformance with the California Desert Conservation Area Management Plan of 1980, as amended, and the Desert Renewable Energy Conservation Plan (Record of Decision, September 2016). The approval of this action is consistent with the BLM's surface management regulations at 43 CFR 3809 and FLPMA.

DECISION RATIONALE

In the FONSI for this action, a determination was made that none of the alternatives will significantly affect the quality of the human environment and that preparation of an Environmental Impact Statement is not required. The selected alternative meets the BLM's need and is preferred over other alternatives because that alternative provides ingress & egress necessary to drill the appropriate locations in compliance 43 USC 1732. The BLM has determined that the operations under the selected alternative will not cause unnecessary or undue degradation, as defined in the BLM's surface management regulations at 43 CFR 3809.

PUBLIC INVOLVEMENT

The EA for this action was placed on BLM's public ePlanning NEPA website on September 7, 2018 and the BLM accepted public comments until close of business October 12, 2018. The public comments received by the BLM and the agency's responses are included in APPENDIX A of this decision.

CONSULTATION AND COORDINATION

The National Park Service was a cooperating agency for the EA.

APPEALS

A party adversely affected by this decision may ask the State Director of the appropriate BLM State Office to review the decision under 43 CFR 3809.800. An adversely affected party may also bypass the State Director and directly appeal to the Office of Hearings and Appeals (OHA) in accordance with the regulations contained within Part 4 Title 43 of the Code of Federal Regulations.

A request for State Director Review must be received within 30 days of the time you receive or are informed of the BLM decision. The address is:

Director
California State Office
2800 Cottage Way, Suite W-1623
Sacramento, CA 95825

Your request for State Director review must be a single package that includes a brief written statement explaining why BLM should change its decision and any documents that support your written statement. Mark your envelope "State Director Review." You must also provide a telephone or fax number for the State Director to contact you. Once the State Director issues a decision, it replaces the original BLM decision, which is no longer in effect, and you may appeal only the State Director's decision. If the State Director does not make a decision within 21 days on whether to accept your request for review, you should consider your request for State Director review declined, and you may appeal the original BLM decision to OHA. The State Director's decision will be effective immediately and remain in effect, unless a stay is granted by OHA.

An adversely affected party may appeal the State Director's decision to OHA under 43 CFR 4. An adversely affected party may also bypass State Director review and directly appeal a BLM decision to the Office of Hearings and Appeals (OHA).

In order for OHA to consider your appeal of a decision, you must file a notice of appeal in writing with the BLM office where the decision was made. Your written appeal must contain: your name and address and the BLM serial number of the notice or plan of operations that is the subject of the appeal. You must submit a statement of your reasons for the appeal and any arguments you wish to present that would justify reversal or modification of the decision within 30 calendar days after filing your appeal. All decisions go into effect immediately and remain in effect while appeals are pending before OHA unless OHA grants a stay.

In order for OHA to consider your appeal of a decision, you must file a notice of appeal in writing with the BLM office where the decision was made (the Ridgecrest Field Office). That address is:

Bureau of Land Management, Ridgecrest Field Office
300 S. Richmond Road
Ridgecrest, CA 93555

Your written appeal must contain: your name and address and the BLM serial number of the notice or plan of operations concerning the subject of the appeal (CACA-033965). You must submit a statement of your reasons for the appeal and any arguments you wish to present that would justify reversal or modification of the decision within 30 calendar days after filing your appeal. All decisions go into effect immediately and remain in effect while appeals are pending before OHA unless OHA grants a stay of decision under 43 CFR 4.21. The burden is on the appellant to make the request for such a stay. The petition for a stay of decision must show sufficient justification based on the following:

- a. The relative harm to the parties if the stay is granted or denied,
- b. The likelihood of the appellant's success on the merits,
- c. The likelihood of immediate and irreparable harm if the stay is not granted, and
- d. Whether the public interest favors granting the stay.

Signed:



Carl B. Symons
BLM, Ridgecrest Field Manager

11/29/2018
Date

APPENDIX A

Keystone Mine EA Public Comments and Responses

Keystone Mine EA Public Comments and Responses

Water use/water right: related to the use of the spring and haul water

Comment 1: Commenters had questions regarding the use water from Sourdough Spring, with some in favor of the operation and others against. Most of the comments concerned the use of the 470 gallons per day (gpd) from Sourdough Spring versus hauling in additional water.

Representative quote: "I would like to suggest that BMC not be allowed to modify existing piping to divert water from Sourdough Spring to a water tank outside the park. Modifying water lines disturbs the ground and habitat, including the water source. There is really no reason for public lands to be disturbed for mining operations."

Response: Please refer to EA at Section 2.5.3 for specific language regarding the use of water from Sourdough Spring. The mine operator, Bush Management Company (BMC), has a water right (CA water license #4716) to divert up to 470 gpd for domestic and mining use from Sourdough Springs. A flow meter or some other device, such as a restriction valve or smaller intake, would be installed in the pipeline at Sourdough Spring to ensure that the 470 gpd limitation is not exceeded.

In accordance with CMA LUPA-SW-18, water used as part of the Proposed Action would be used solely for the Proposed Action. A minimum sized 5,000-gallon enclosed portable plastic water tank would be set up at the base of the Keystone Mine Maintenance Road where it meets the Goler Wash Road. The tank would be filled using the water trucked in from Trona and the water piped in from Sourdough Spring. Water haulage and piping would continue for the duration of the Proposed Action.

The water trucks would have a capacity of about 5,000 gallons and a maximum of three trips per day may be made. The water trucks would not travel to Sourdough Spring or within Death Valley National Park.

Comment 2: Commenter asked to clarify the source of water coming from Trona and impacts related to that source area.

Response: The water from Trona, if needed, will be from a non-federal source and that operation is responsible for analysis of impacts related to its water source. See EA at Section 2.5.3.

Comment 3: How could the BLM approve water diversion when original Plan of Operations predated the establishment of millsite?

Response: There is no requirement to have a claim or millsite prior to providing BLM a plan of operations, or prior to the BLM's approval of any such plan of operations (see definition of "Operations" at 43 CFR 3809.5).

Prior to BLM's approval of the plan of operations in 1981 and as amended in 1988 and prior to the previous owners claim for a millsite in 1989, the previous mine owner had a water right to divert 470 gpd from Sourdough Springs with a priority date of 1941. That water right did not and does not depend on the validity of the millsite. The project proponent – BMC – now owns that water right (CA water license #4716). The area surrounding and including Sourdough Springs was transferred to NPS management in 1994 and the NPS is treating the Minor Plan Modification submitted to the BLM (and forwarded to the NPS by the BLM) as submittal to the NPS under 36 CFR Part 9, subpart A (referred to as the Part 9A regulations). NPS's review of the Minor Plan Modification for the use of the water pursuant to the water right does not depend on the millsite claim.

Water Resources: related to the use of the spring and the impacts on wildlife, riparian vegetation and the Tribes.

Representative quote: "The project will extract 470 gallons per day from Sourdough Spring. This raises concerns for all of the wildlife that uses the spring. Will a reduced water supply take food and water away from bighorn sheep and other wildlife? Will a reduced water supply remove habitat for avian fauna and the Panamint alligator lizard?"

Comment 4: Many commenters expressed concerns over the use of the water and the impacts to the ecology of the area. A few responses expressed concern that this process was an overreach and slowing down job opportunities in Inyo County.

Response: BMC's water right (CA water license # 4716) to divert up to 470 gpd from Sourdough Springs for domestic and mining use converts to a constant diversion rate of 0.33 gallons per minute (gpm). The NPS conducted three measurements of the spring between 2003 and 2017. These opportunistic measurements of spring flow rates at the point of diversion range from approximately 4,300 gpd in late summer of 2016 to 43,000 gpd in early spring 2003. Based on these flow rates, the diversion rate allowed by the water right will range from 1.1% to 11% of the total spring flow.

When Sourdough Springs was still under BLM management, the Plan of Operations as amended in 1988 included mitigation to protect the riparian habitat in Goler Wash, including the riparian zone at Sourdough Springs. One of these measures required moving the point of diversion to the lower edge of the riparian zone (the downstream area of the springs) into a small earthen impoundment that feeds a bathtub collection system. This configuration, which is still in place, was designed to minimize impacts to ecological resources within the riparian zone.

The spring flow diversion features may actually increase water availability to larger mammals, because the earthen impoundment and the bathtub collection create open ponded water features that do not occur naturally. Also, maintenance of the point of diversion requires the removal of vegetation which increases the accessibility of the ponded water to larger mammals.

Maintenance of the diversion features requires trimming or removing vegetation. No vegetation impacts from spring flow diversion are expected above the point of diversion. The spring flow

below the point of diversion flows onto Goler Wash Road, so wetland and riparian vegetation has not established due to repeated passing of vehicles.

The spring flow that infiltrates into Goler Wash below the point of diversion is likely to reemerge as spring flow in downgradient springs in the canyon. Therefore, the spring flow diversion may reduce the flow in downgradient springs which support wildlife, riparian zones, and aquatic ecosystems. However, this return recharge is believed to be a minor contribution to these springs, and the impacts of reducing this component by 0.33 gpm would be indiscernible.

Comment 5: Commenter requested that the EA include impacts of water diversion to Timbisha Shoshone Tribe.

Response: Both agencies must comply with section 106 of the National Historic Preservation Act (NHPA) of 1966 as implemented by 36 CFR part 800. As explained in Section 2.7.1 of the EA, the proposed activities on under the BLM's jurisdiction were evaluated and it was determined that the operations were exempt as minor modifications to or minor variances from activities described in an approved underground or surface mining plan of operations that does not affect historic properties for which previous Section 106 consultation has been completed. The identification number for the Exempt Undertaking finding is CA-650-EX-2017-34. The NPS will conduct a new survey of the Sourdough Spring millsite and prepare an Assessment of Effects finding for the California State Historic Preservation Officer (SHPO) and affiliated tribes as required by Section 106 of the NHPA. It is not anticipated that any cultural resources would be encountered, as this project would be conducted entirely on previously disturbed ground utilizing existing access roads.

Noise/Soundscapes: Related to the noise associated with the exploration operation

Representative quote: "The entire project would be powered by loud diesel generators. How would the noise impact wilderness qualities in the adjacent Manly Peak Wilderness Area and Death Valley National Park? Emissions from generators also conflict with wilderness and conservation values. "

Comment 6: Multiple commenters requested to know how noise will impact the quality of wilderness and Park lands.

Response: The EA at page 5 imposes LUPA-BIO-12, which requires standard noise controls to be used on drilling equipment. This is sufficient to reduce potential impacts to less than significant. Additional language has been added to the EA at page 27: "All other resources were determined not to have the potential for significant impacts with the addition of mitigation measures and conservation management actions." Impacts to the soundscape in Death Valley National Park and adjacent areas would be localized and temporary.

Visual Impacts: related to the visual impacts associated with mining activities at the Keystone Mine

Representative quote: "It is reasonable to expect the proponent to cause visual disturbances. The EA does not analyze visual impacts, which may imply none are expected. But the experience from 2016 and complete lack of any visual impact analysis in the EA arouses suspicion. The EA must provide visual impact analysis."

Comment 7: Most commenters suggested that the water line and mining equipment would be an impact to the visual aesthetics of Goler Wash. A commenter also asked if lights would be shut off at after dark.

Response: Please see the EA at Appendix A, which states that impacts to Visual Resources are anticipated to be in accordance with previously authorized activities. Also See EA at LUPA-BIO-13: Nighttime lighting would be short-term and limited to only necessary use areas. Further, Section 4.5 includes a discussion of visual impacts on recreational use. As a result of minor visual impacts, LUPA-BIO-4 is being required to reduce visual barriers.

Recreation and Access: related to recreation and access to the area and Death Valley National Park

Representative quote: "As a recreational user of the area my only concerns are vehicle access on Goler Wash Road and to what extent the local fauna will be affected by the changes to the Sourdough Spring."

Comment 8: Multiple commenters expressed concern that the proponent with equipment and water hauling trucks would have a direct impact to recreation and access.

Response: As outlined in the EA at Sections 3.4 and 4.5, the Goler Wash Road is an Inyo County road (Also known as Coyote Canyon Road) which would remain open and in place during and after all proposed activities.

Comment 9: Commenter believes the recreation impact is stated incorrectly and that Keystone route is often driven up.

Response: While the commenter is using the subjective term "often," the Keystone Mine Maintenance Road is not a designated OHV route. As the EA explains, the Keystone Mine Maintenance Road would not provide public access to the Project Area until the completion of exploration or mining activities, but the Goler Wash Road would remain open. Refer to Sections 3.4 and 4.5 of the EA for a description of the proposed drilling activity in relationship to the more frequently used Goler Wash Road.

Comment 10: Commenter is concerned about Wingate Road being nearly impassable in wet weather, therefore trucks may go around and damage vegetation and this needs to be analyzed in EA.

Response: Wingate Road is a county maintained road. The BLM has added a condition to the Decision Record which states, "Unless otherwise approved, access to the area is via county roads and designated routes and cross country travel is prohibited."

Air Quality:

Representative quote: "Increased traffic will cause regular dust issues that will impact the air quality and visual resources of the adjacent wilderness and national park unit."

Comment 11: Commenters were concerned about air quality from fugitive dust associated with operations and increased truck traffic hauling water to the site.

Response: See EA at Sections 3.2 and 4.3. A fugitive dust control plan will be prepared and implemented in accordance with LUPA-AIR-5. As the EA states in Section 4.3, an increase in fugitive dust during windstorms could occur due to the loosening of previously disturbed soil disturbance as a result of the Proposed Action. The Proposed Action would negligibly affect air quality because activities utilizing mechanized equipment would be geographically limited within the canyon and short-term, lasting for a maximum of 12 to 18 months. No measurable offsite impacts are anticipated. Because of its location in Panamint Valley, which is an unclassified area for PM10 and an attainment area for PM2.5, no further conformity analysis or determination is necessary.

Green House Gases (GHG):

Comment 12: Commenter concerned that the EA does not include an analysis of GHG emissions.

Response: Please see Appendix A, which states that the Proposed Action would not impact or contribute substantially to increase GHG emissions and does not meet the requirements for greenhouse gas reporting (<https://www.epa.gov/ghgreporting>).

Special Status Species:

Representative quote: "Although Nelson's bighorn sheep are known to occupy habitat throughout the southern Panamint Mountains, the EA simply states that "Special status animal species having the potential to occur in the area include ... Nelson's bighorn sheep (Ovis canadensis nelsoni) ..."

Comment 13: Multiple commenters suggested the operation would have impacts to a wide range of species that were either not considered in detail or not considered at all in the EA, including several special status species such as Nelson's bighorn sheep, yellow billed cuckoo, Panamint alligator lizard, Inyo CA towhee, and desert tortoise.

Response: The EA did not mention yellow billed cuckoo and Inyo CA towhee because these species are not known to occur in the project vicinity. The EA at Section 4.6 analyzed impacts to special status species. Due to the disturbed nature of the project site and the temporary nature of the project, species descriptions and analysis, including Nelson's bighorn sheep and Panamint alligator lizard, were sufficient to analyze and reduce the potential impacts of the project to a less than significant level through conservation management actions such as LUPA-BIO-4 – seasonal restrictions would be implemented or visual barriers installed for activities which may impact Focus or BLM special status species, if present. See also Section 1.5 Conservation Management Actions of EA.

Comment 14: The commenter is concerned that the EA should include additional analysis of tortoise habitat in relation to the mine.

Response: The EA at Section 3.5 describes how the Project area is disturbed and does not contain all of the elements for desert tortoise occupancy. No tortoise or their sign was found in the Project area during the 2017 biological survey. Since desert tortoises do not occupy the Project area, there is no need for additional analysis.

Comment 15: Commenter suggested that the EA should include a list of mitigation measures including a requirement of a designated biologist to ensure compliance of the protection measures and CMAs. They also specifically recommended that the EA should include LUPA-BIO-6, which has subsidized predator standards.

Response: Please see EA page 4, Section 1.5 Conservation Management Actions for a list of the mitigation measures. CMA LUPA-BIO-6 has been added to the EA.

Comment 16: Commenter points out that the BLM provides three titles of biological opinions in the EA and inconsistent issuance dates. They were unsure under which biological opinion BLM is operating to obtain its authorization for incidental take for the Proposed Project.

Response: The biological opinion for the Keystone drilling proposal tiers from a programmatic consultation that the BLM and U.S. Fish and Wildlife Service (Service) completed in 2017 (Service 2017, Biological Opinion for Activities in the California Desert Conservation Area). During that consultation, the BLM proposed to re-initiate formal consultation if 15 large desert tortoises are killed in a calendar year as a result of its activities; the Service then used that number as the basis of its analysis to determine whether the programmatic consultation was in compliance with section 7(a)(2) of the Endangered Species Act. The Service concluded that the BLM's proposed action was not likely to jeopardize the continued existence of the desert tortoise; i.e., the proposed action was in compliance with section 7(a)(2). Because the Service reached a non-jeopardy conclusion, the incidental take of desert tortoises (up to 15 large individuals, the number analyzed in the biological opinion) is exempted from the prohibitions against take that are contained in section 9 of the Endangered Species Act. As agreed to during the consultation, the Bureau will monitor its activities and re-initiate consultation, if needed. In summary, the incidental take statement in the 2017 biological opinion applies to the Keystone drilling proposal. The language that references the Biological Opinion (6840 CA-063.50) (1-8-

97-F-17) was an error. The language in Appendix A was also incorrect, so thank you for alerting us to this error. The language has been corrected in both.

Mining in Parks Act:

Representative quote: "Please clarify how the NPS will comply with 36 CFR Part 9?"

Comment 17: Commenters were concerned how the BLM and NPS were working together in light of two different sets of regulations governing mining activities. Some suggested the NPS should not be involved at all, while others asked how the NPS would comply with 36 CFR Part 9, subpart A (the Part 9A regulations) for the Keystone Mine and Sourdough Spring.

Response: Pursuant to the California Desert Protection Act of 1994 (CDPA), Congress expanded the boundary of Death Valley National Park to include the area surrounding and including Sourdough Spring (where water is planned to be diverted) and directed the NPS to administer these areas in accordance with the laws applicable to the National Park System, including the NPS Organic Act and the Mining in the Parks Act of 1976. Thus, any operations related to the Keystone Mine (which itself is not located within the Park) are subject to the regulations issued pursuant to the Mining in the Park Act of 1976 that are found at 36 CFR Part 9, subpart A (the Part 9A regulations). The Part 9A regulations apply to mining and related operations within a park boundary whether the operations are on patented or unpatented mining or millsite claims, are related to transport across park lands, or related to the diversion of water under a perfected water right issued by a state and not located on a mill site claim.

The activities proposed to be conducted by BMC—diversion and transport of water from Sourdough Springs within the Park in support of the mining activities at the Keystone Mine site—are subject to the Part 9A regulations. This is the case even though BMC has a water right to divert 470 gpd from Sourdough Springs (CA water license #4716). The NPS is reviewing the Minor Modification submitted in 2016 for consistency under the Part 9A regulations but only the operations that will occur within the boundaries of Death Valley National Park.

Typically the NPS has requested that a mine operator submit a plan to the NPS for operations subject to Part 9A regulations even for those operations which have an approved Plan of Operations (PoO) from another federal agency such as the BLM. The NPS has no record that it reached out to the previous owner to submit a separate plan to the NPS when the Sourdough springs area transferred to NPS administration in 1994. In fact, the NPS has no record of communication between it and the previous owner. NPS treating the minor modification submitted to the BLM (and forwarded to the NPS by the BLM) as submittal to the NPS under the Part 9A regulations.

Mining- history of compliance, jurisdiction and plan of operations

Comment 18: Commenter asked how the 1981 Mining plan is still legitimate after 25 years? They recommended the BLM require a new PoO for review.

Response: Under the BLM's regulations at 43 CFR 3809.423, a plan of operations remains in effect as long as it is properly maintained with the BLM. A plan of operations modification is required if new activities that were not part of the original authorization are proposed, as occurred in this situation.

Comment 19: Commenter requests we include a new section 1.2B in the EA entitled "Acknowledgement of Valid Existing Rights Held by Keystone Mine" and add the following verbiage:

1. "State of CA water permit License #1004716 with a priority date of 1941 ("Water Permit")"
2. "Valid Millsite Claim, described as "Sourdough Millsite" and registered under serial number CAMC#231701 (Lead Serial #231700) located and recorded November 1989"
3. "A PoO originally approved in April 1981, a mod with EA approved in June 1983, and a mod with EA approved in Oct. 1988. The Water Permit and Sourdough Millsite are both part of the valid existing rights obtained in the approved Plans of Operation. The PoO approvals include both the source and use of the water under the Water Permit, and the general location and use of a water transmission line from the Sourdough Millsite to the foot of the approved mine maintenance road."
4. BMC recognizes the valid creation of the NPS in 1994, and that this new boundary places the location of the Sourdough millsite claim inside DVNP, subject to the valid existing rights described above.
5. Federal Law provides that each federal agency has jurisdiction only over that land area specifically granted to it by statute. Accordingly, the rights of NPS to administer, govern, or comment on activities taking place on any land inside of the Keystone POO areas that is west of the western boundary of DVNP are prohibited. All future actions under the POOs, or modifications thereto, will be singularly administered by BLM. NPS is precluded from acting as a NEPA Co-Lead Agency for all matters affecting Keystone Mine, other than actions taking place on the land under the Sourdough Millsite claim. Should Keystone Mine apply for any changes to the Sourdough Millsite claim affecting land within DVNP, NPS shall have jurisdiction for those matters affecting that land within DVNP.
6. In the event of a conflict between this Paragraph 1.2B and any other provisions of this EA, the interpretation under this Paragraph 1.2B shall prevail.

Response:

1. Please see EA, Figure 4 for reference to the water permit number and date.
2. Please see EA at Section 2.3: Water Use and Pipeline. The Sourdough Millsite is now under the jurisdiction of the NPS.

3. Please see EA at Section 1: Introduction and Section 2.1: Site History for reference to these documents. Pursuant to the California Desert Protection Act of 1994 (CDPA), Congress expanded the boundary of Death Valley National Park to include the area surrounding and including Sourdough Spring (where water is planned to be diverted) and directed the NPS to administer these areas in accordance with the laws applicable to the National Park System, including the NPS Organic Act and the Mining in the Parks Act of 1976. Thus, any operations related to the Keystone Mine (which itself is not located within the Park) are subject to the regulations issued pursuant to the Mining in the Park Act of 1976 that are found at 36 CFR Part 9, subpart A (the Part 9A regulations). The Part 9A regulations apply to mining and related operations within a park boundary whether the operations are on patented or unpatented mining or mill site claims, are related to transport across park lands, or related to the diversion of water under a perfected water right issued by a state and not located on a mill site claim.

The activities proposed to be conducted by BMC—diversion and transport of water from Sourdough Springs within the Park in support of the mining activities at the Keystone Mine site—are subject to the Part 9A regulations. This is the case even though BMC has a water right to divert 470 gpd from Sourdough Springs (CA water license #4716). The NPS is reviewing Minor Modification submitted in 2016 for consistency under the Part 9A regulations but only the operations that will occur within the boundaries of Death Valley National Park.

Typically the NPS has requested that a mine operator submit a plan to the NPS for operations subject to Part 9A regulations even for those operations which have an approved PoO from another federal agency such as the BLM. The NPS has no record that it reached out to the previous owner to submit a separate plan to the NPS when the Sourdough springs area transferred to NPS administration in 1994. In fact, the NPS has no record of communication between it and the previous owner. NPS treating the minor modification submitted to the BLM (and forwarded to the NPS by the BLM) as submittal to the NPS under the Part 9A Regs.

As noted, the NPS has reviewed the PoO only for the activities that take place within the Park. Validity examinations on unpatented mill sites within park units are normally conducted prior to NPS approval of proposed plans of operation. In this case, given that BMC has not requested a validity determination and given the costs and time required for such a determination, a validity examination of the millsite was not necessary at this time because BMC has a water right (CA water license #4716) to divert 470 gpd from Sourdough Spring for mining and domestic purposes. Even if the mill site claim was found to be invalid, the state water right would still exist.

4. Thank you for your comment.

5. Please see EA at Section 1.2 Decision to be Made, for an explanation about jurisdiction of BLM and NPS.

6. Thank you for your comment, but the agencies decline to make this change to the EA.

Comment 20: BMC recommends that these clarifications can be made without a re-publication of the EA as these clarifications are simply a recitation of current law rather than introducing any

new issues which might conflict with existing law. If BLM and or DOI accepts these suggested changes BMC will withdraw its 2 pending appeals filed with IBLA concurrently with the issuance of the ROD for this matter

Response: Thank you for your comment, but the suggested language is outside the scope of the EA.

Alternative(s):

Comment 21: Commenter suggests that the BLM evaluate an alternative that looks at different locations with less impacts.

Response: BLM cannot refuse claimants' reasonably incident activities on mining claims provided they meet the requirements of 43 CFR Subparts 3715 and 3809. "Different locations with less impact" is too vague to analyze, as mineral resources are not uniformly found across the area. The applicant determined that this is the best location for their purposes to determine if mineral resources are present in the area and no specific suggestions for alternative locations have been made by any stakeholder or member of the public.

Comment 22: Commenter believes the EA should consider underground drilling in the same detail as it considers the proposed drilling operation.

Response: As explained in the EA at Section 2.8, underground drilling as an alternative was considered but eliminated. The workings would need to be rehabilitated to current Mine Safety and Health Administration standards prior to underground drilling and that work would have been cost prohibitive for drilling.

Comment 23: Commenter recommends that a third alternative be added that only has water from Trona and none taken from Sourdough Springs.

Response: Please see EA at Section 2.5.3: Water Haulage and Storage. A separate alternative that only has water being hauled from Trona was not included because it is already within the scope of the analyzed alternatives. Without the Sourdough Springs water there would be enough water to fill the tanks with three truck trips a day.

Comment 24: Commenter suggests that the BLM should select the No Action Alternative and consider that this project could lead to an even bigger mining project.

Response: NEPA requires BLM to analyze reasonable foreseeable developments (40 CFR 1508.7), but not to speculate. A future action (such as a commercial mining operation) becomes reasonably foreseeable once it is proposed, but until then is merely speculative and need not be considered in a cumulative impacts analysis. A reasonably foreseeable analysis considers actions that are likely and can be meaningfully evaluated, rather than merely possible.

Purpose and Need:

Comment 25: Commenter believes that the EA should evaluate the need to protect the values preserved by the adjacent wilderness area and Death Valley National Park. These values would include sensitive species such as bighorn sheep, rare plants, avian fauna, as well as cultural resources, cultural landscapes, hydrologic resources and visual resources.

Response: Please see EA at Section 1.1 Need For Action. It is the BLM's Purpose to comply with this need while ensuring compliance with applicable land use management plans, protection of resources, and compliance with federal and state laws related to environmental protection. Additional language was added to the EA at Section 1.1 for further clarification.

Compliance with other Regulations:

Comment 26: Commenter mentions that in the EA's section on "Relationship to Statutes, Regulations, or Other Plans," there was no mention of compliance with the Clean Air Act, the Migratory Bird Treaty Act, and relevant executive orders and secretarial orders. They suggest that BLM revise this section of the Final EA to include this missing relevant information.

Response: Please see EA at Sections 2.7.5 and 3.5 for a discussion on compliance with Migratory Bird Treaty Act. The EA at Section 3.2 includes a discussion about Air Resources and the Clean Air Act. Section 4.3 provides a complete analysis of the direct, indirect, and cumulative effects.

Comment 27: Commenter points out that the EA does not mention compliance with the California Endangered Species Act.

Response: Comment noted. The EA was sent to California Department of Fish and Wildlife (CDFW) for review. No comments were received from CDFW.

Reclamation Plan:

Comment 28: Commenters recommend that the Reclamation Plan should include disturbance due to water diversion, must include Inyo County if more than 1 acre, and provide a third party with a performance bond.

Response: Please see 2.5.7 Reclamation. A reclamation plan will be developed after a decision is made and an alternative is selected. The operation remains liable for implementing BLM-required mitigation measures until released by BLM (43 CFR 3809.420(a) (4) and 3809.116(a)). A performance bond will be provided to the BLM or the State that meets the requirements before starting operations. (see 43 CFR 3809.551)

Land Status and Designations:

Comment 29: Commenter believes the Land Status Map is too grainy.

Response: See EA at Figure 2, the map is at a scale and resolution that is acceptable

Comment 30: Commenter states that in comparing Figure 4 of the Appendices, entitled “Sourdough Millsite Claim”, with a prior official version dated 2013, commenter notes significant differences in land use designations, the proper designation of the boundary of the Sourdough Millsite claim, and other matters. Figure 4 cannot be, or function as, an official document because Figure 4 contains changes to official land use designations which have been done without proper notice to affected parties, and other stakeholders in the affected areas.

Response: Figure 4 of the EA reflects the correct, current land use designations from the Desert Renewable Energy Conservation Plan, as approved in 2016.

General Questions and Clarifications:

Comment 31: Commenter suggests the EA should include a Fire Management Plan

Response: Please see EA page 20, section 2.7.7: Fire Protection. The operator is also required to meet fire performance standard at 43 CFR 3809.420(b)(10).

Comment 32: Commenter asks for Applicant Address Clarification and also if this is the Bush Management that has around 50 other claims.

Response: The project proponent’s address is: Bush Management Company, P.O. Box 11179, Newport Beach, CA 92658. The applicant may have other claims, but this is outside the scope of this analysis.

Comment 33: Commenter believes the disturbance area is miscalculated and the acreage is under-reported.

Response: See EA at Section 2.5.2: Drilling. A larger area is already disturbed and not included in the table, the calculation in the table is for the drill hole sites within this already disturbed area.

Comment 34: Commenter points out that the BLM Press Release had incorrect location information.

Response: The commenter is correct that the press release contained the wrong project location information. However, all other documents, including the EA, had the correct location, the EA was available on ePlanning. The BLM has determined that the comment period was sufficient.